

**Abstract:**

There is described a method for controlling an electric motor comprising an operating relay having relay windings with respective first and second relay contacts and a control means, which motor via current conductors is connected to said relay and a power source wherein an operator by using said control means controls the application of current to the motor armature or rotor and field coil(s) or field magnet(s), monitoring devices are provided which sense indicating parameters that are compared with respective corresponding reference values in a safety function unit in order to determine whether the contacts of the operating relay are mistakenly in the on position, and if one of the contacts is the on position, ensures the switching on of at least the other one of the relay contacts so that the current application to the motor is interrupted and the motor stops. There is also described a control system for an electric motor, wherein sensors/sensing means are provided arranged at suitable measuring points in the system or motor circuit connected to the safety function unit and arranged so that when there is no control signal to the relays, the contacts of both relays are energised and the motor stops.